Alaskan Way Viaduct Replacement Program Update

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Washington State Transportation Commission
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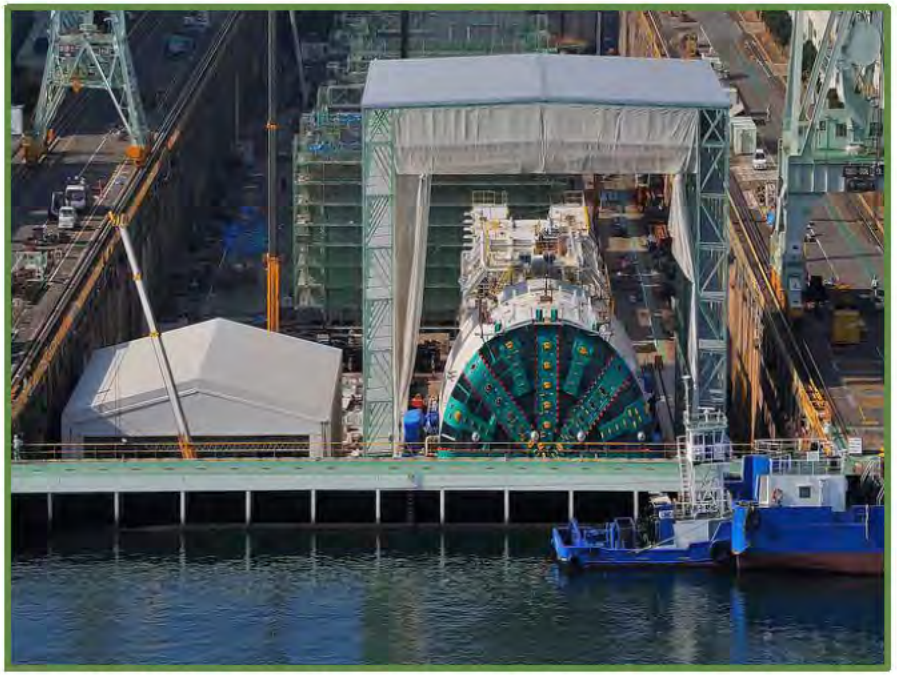
Overview

- Program overview:
  - Schedule.
  - Budget.
- South-end viaduct replacement construction.
- SR 99 Tunnel Project construction.
- Upcoming milestones.



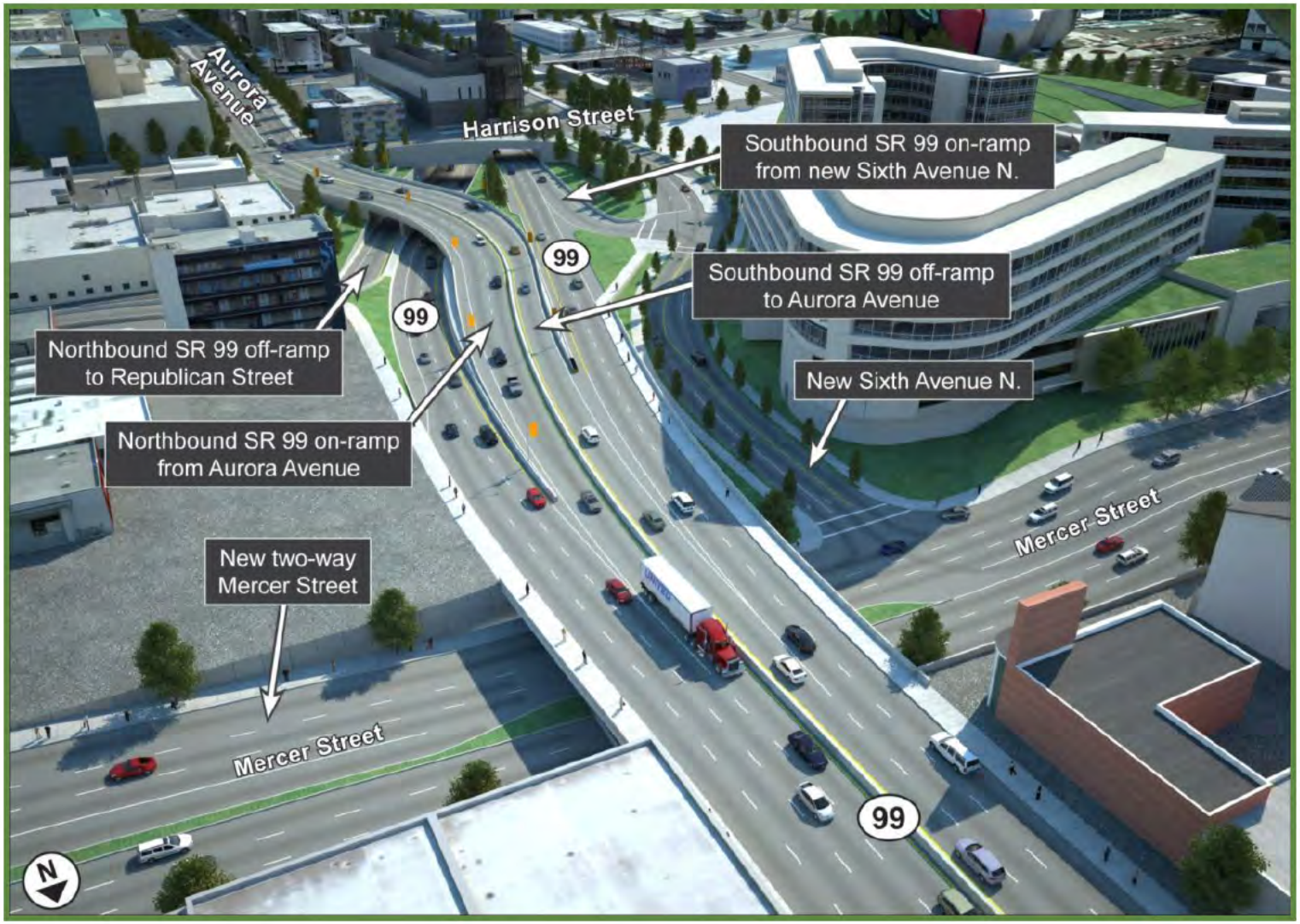
The SR 99 tunnel boring machine in Osaka, Japan.

Building the New SR 99 Corridor

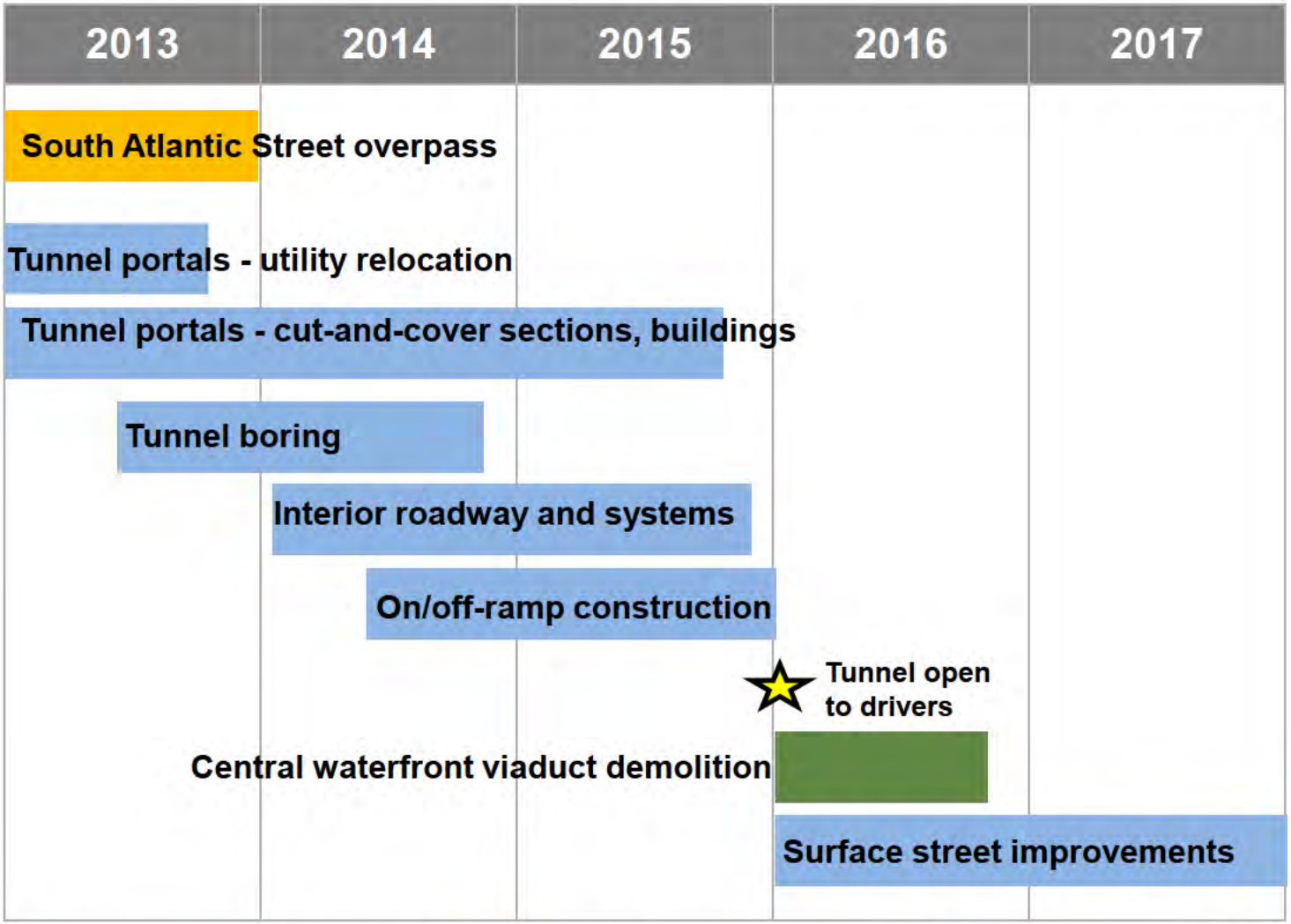
Washington State Department of Transportation

South Portal Design

North Portal Design



Construction Timeline



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Completed State-Funded Projects

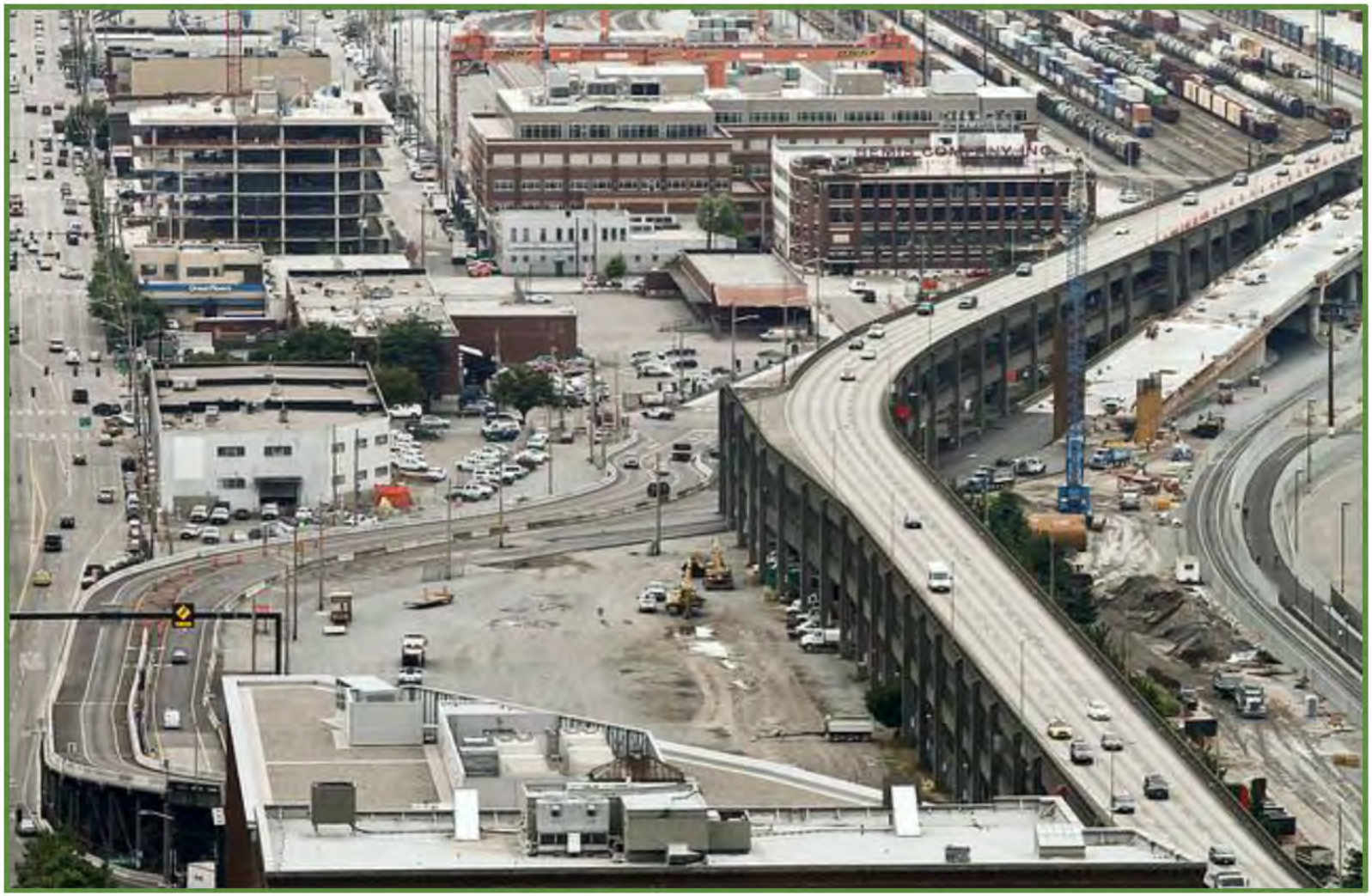
- Column stabilization near Yesler Way *(2008).*
- I-5 travel time signs (*2009).*
- SR 519 Phase 2 (*2010).*
- Spokane Street Viaduct Fourth Avenue off-ramp *(2010).*
- I-5 active traffic management (*2010).*
- City street intelligent transportation systems (*2010).*
- Automated viaduct closures gates system *(2011).*
- SR 99 intelligent transportation systems (*2011).*
- South Holgate to South King Street viaduct replacement – *Stages 1, 2 and viaduct demolition.*

SR 519 Intermodal Access Project.

2012 State Project Budget

State Projects	Budget ($ in millions)
SR 99 Tunnel Project	$2,034.4 million
SR 99 S. Holgate Street to S. King Street Project	$377 million
Central Waterfront Viaduct Removal Battery Street Tunnel Decommissioning New Alaskan Way and Elliott / Western Connector	$290 million
Central Waterfront Construction Mitigation (Parking)	$30 million
Program Management	$75 million
Other Moving Forward Projects	$174.3 million
Environmental Impact Statements (Pre-2009), Right of Way and Design Costs	$163.7 million
Total	**$3,144.4 million**

Southern Mile Before Demolition



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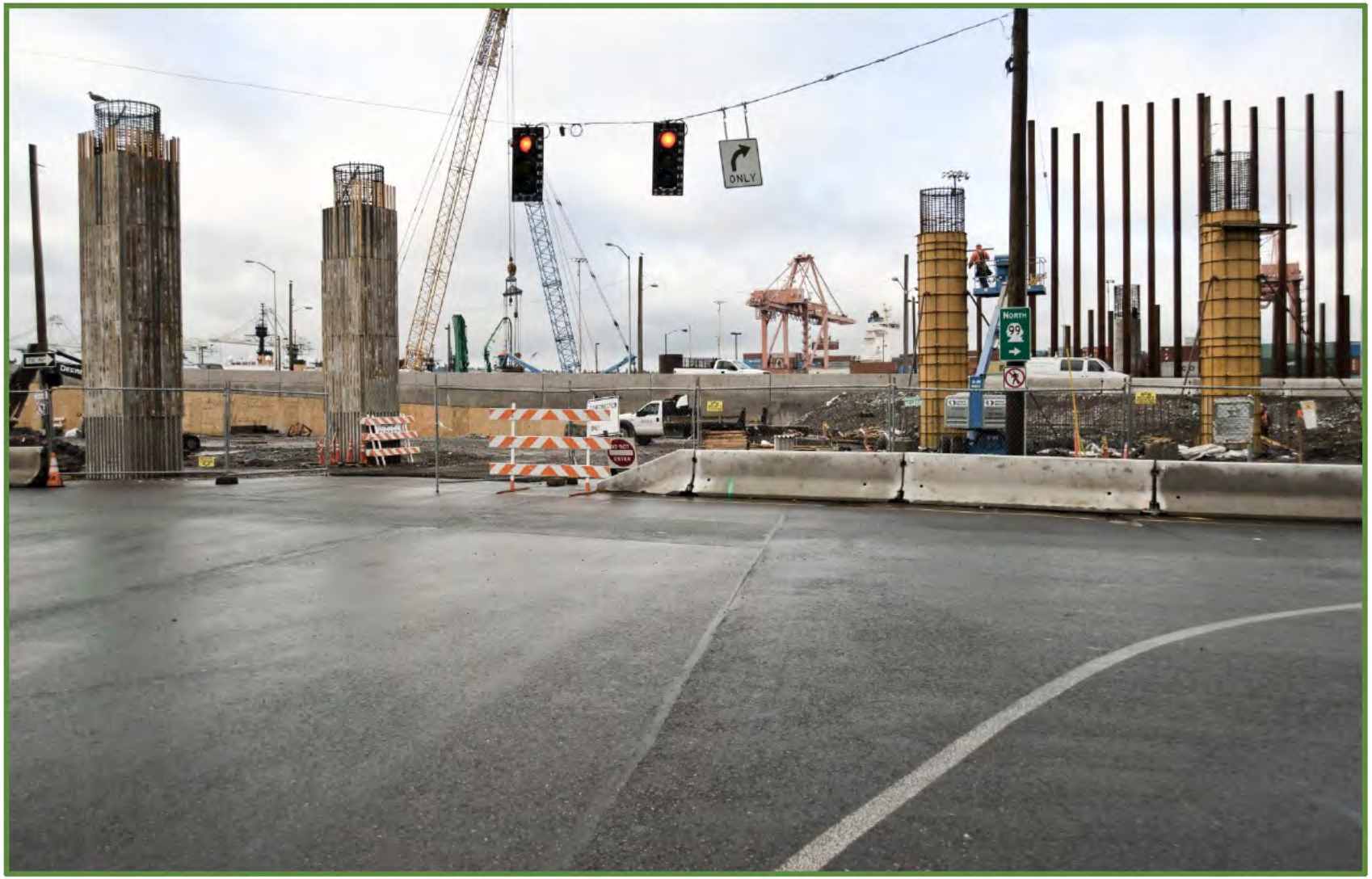
The New SR 99 Bridges

Building a New Overpass

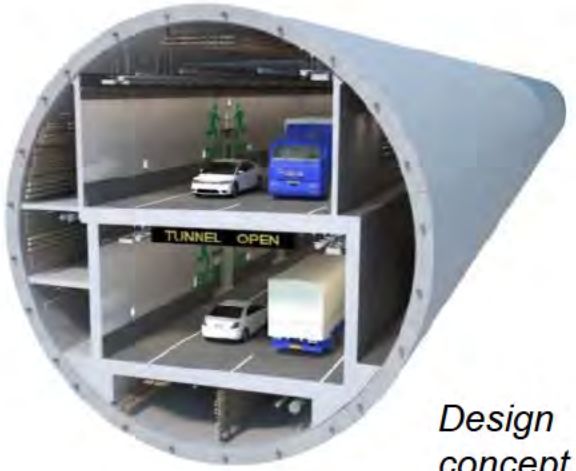


South Holgate to South King Street Project

Washington State Department of Transportation

SR 99 Tunnel

- Approximately two miles long.
- Two lanes with eight-foot safety shoulder in each direction.
- State-of-the-art safety systems.



Design concept.

Washington State Department of Transportation

Excavating the Tunnel Launch Pit

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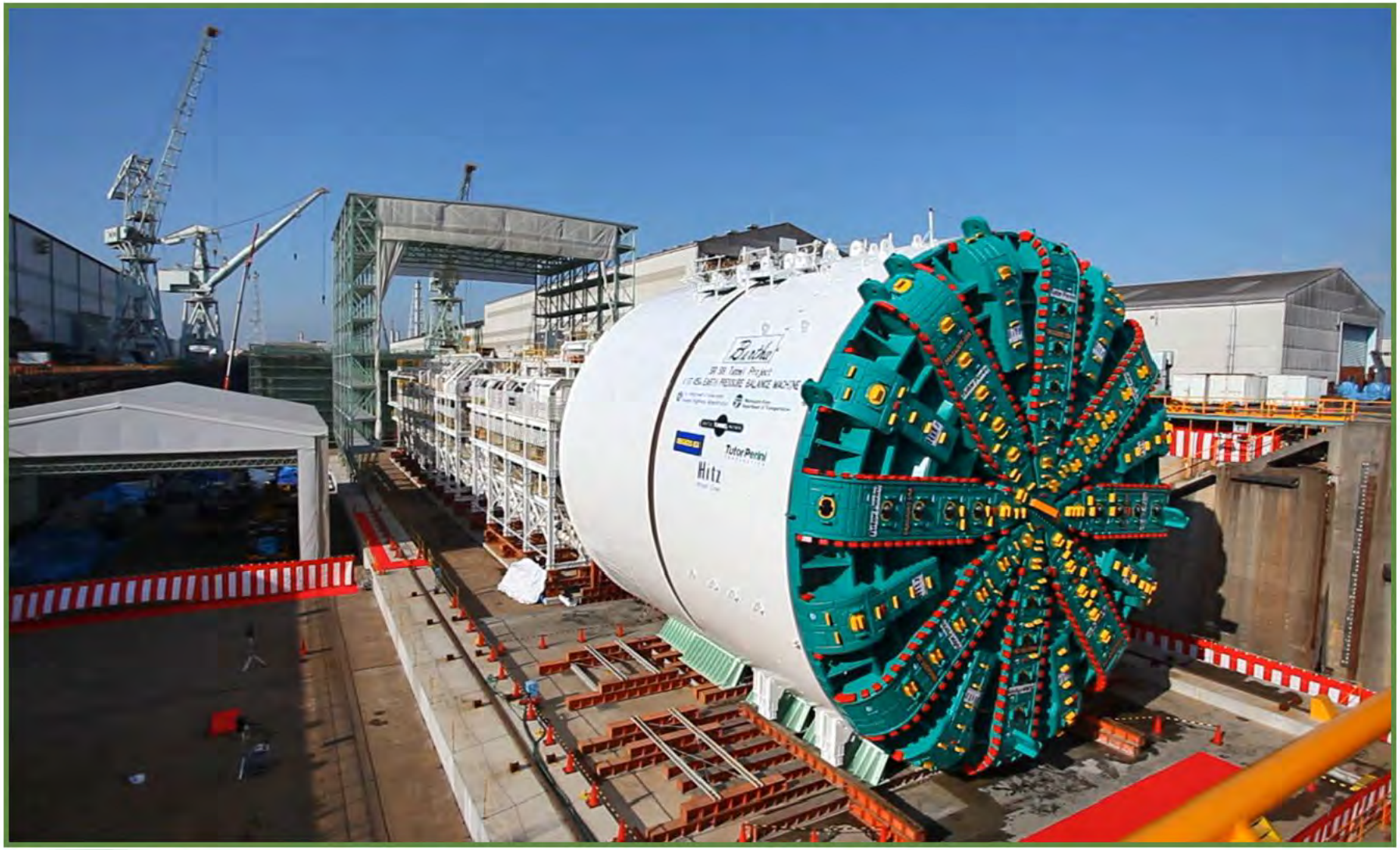
Building the Tunnel Boring Machine

Building the Tunnel Boring Machine

Meet Bertha, the Tunnel Boring Machine

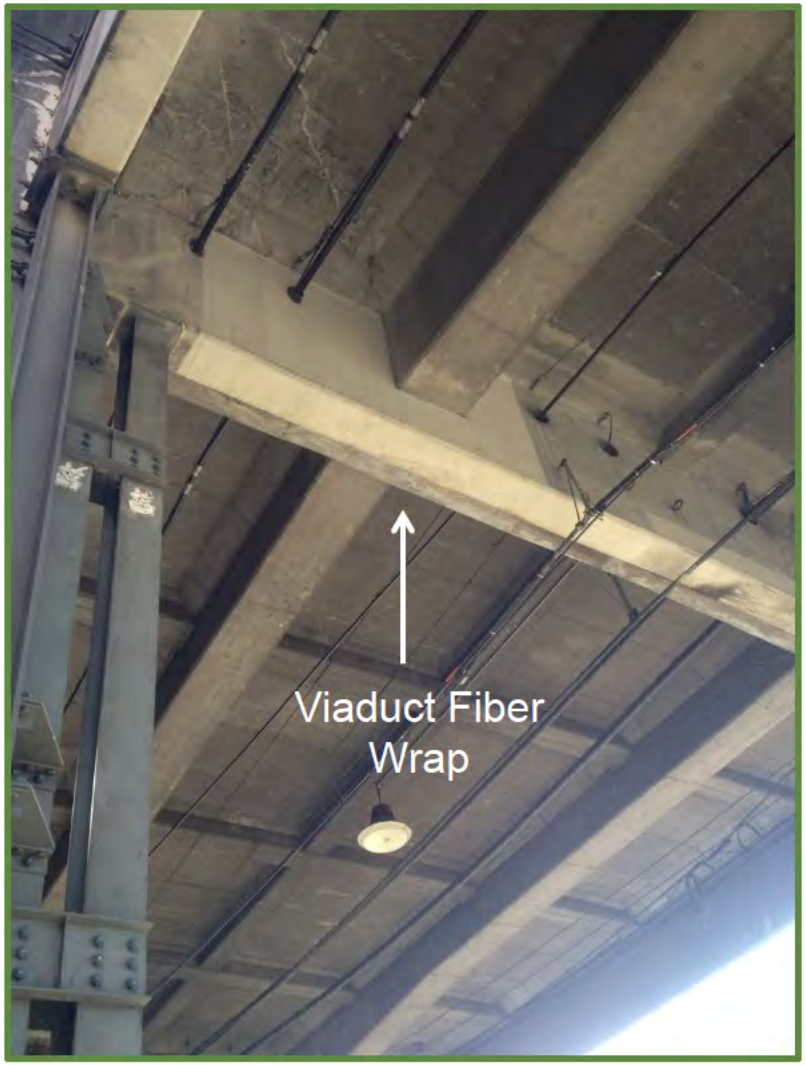


Testing the Machine

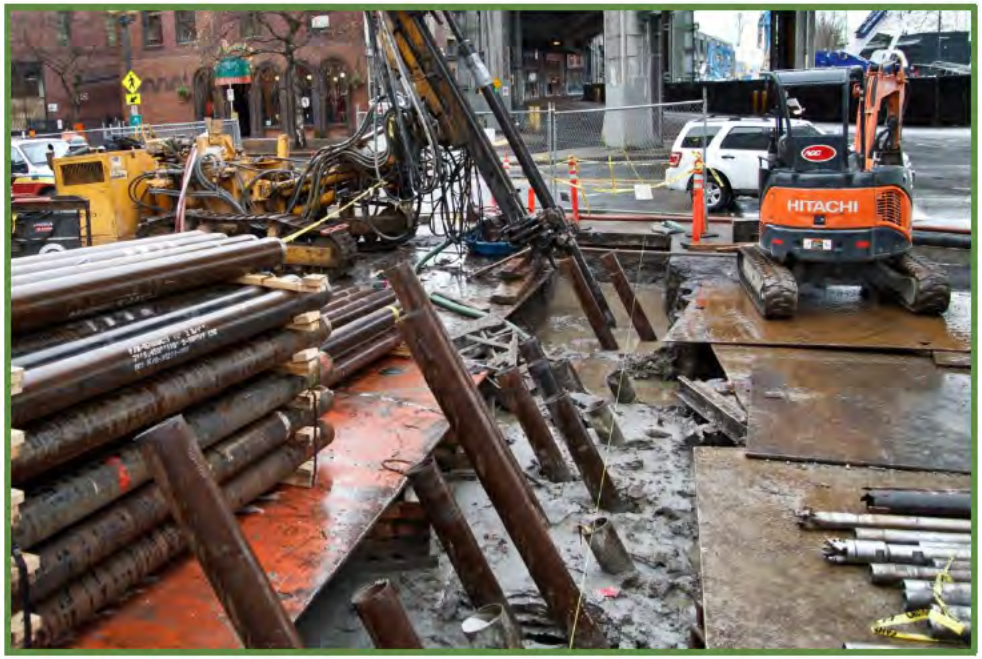
Building Tunnel Support Walls

Secant piles form a support wall where the tunnel boring machine will start tunneling.

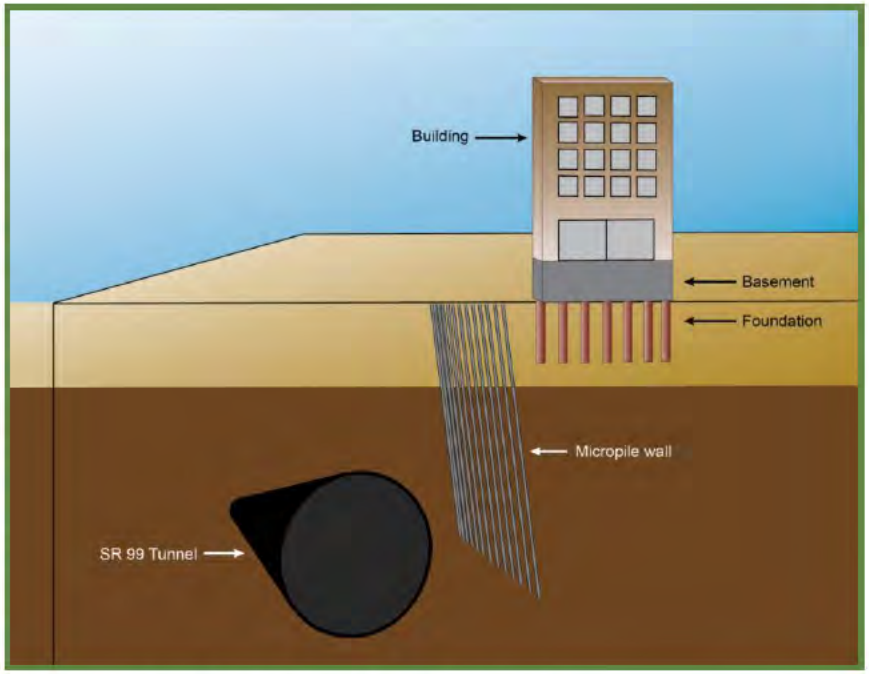
Reinforcing the Viaduct



Installing Micropiles



Crews install micropiles near the Western and Polson buildings.



Conceptual drawing, not to scale.

Properties Above and Near the SR 99 Tunnel

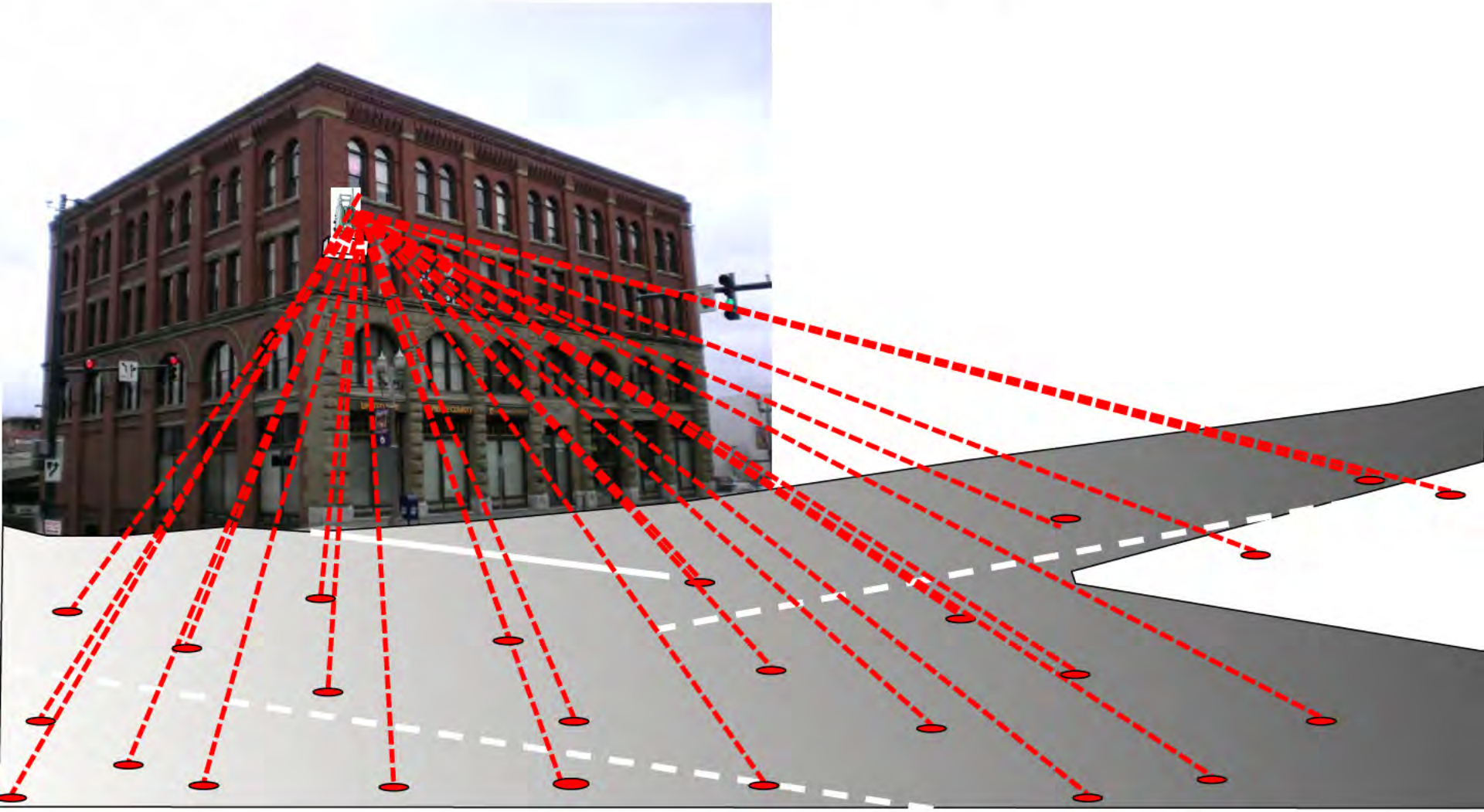
Protecting Structures Along the Tunnel Route

- Install monitoring equipment on nearly 200 buildings.
- Install 700 instruments under streets and sidewalks to measure any ground changes.
- Track measurements of excavated material as tunnel boring machine progresses.
- Use satellite images to assess any changes in ground condition.

Monitoring equipment installed near Pioneer Square.

Ground Monitoring

Automated Survey Machines



Building Tunnel Receiving Pit

Upcoming Program Milestones

- TBM completed and shipped to Seattle (spring 2013).
- Arrival of tunnel boring machine (spring 2013).
- Tunneling starts (summer 2013).
- South Atlantic Street overpass opens (end of 2013).

Transporting the tunnel boring machine for the ESCSO Tunnel Project in Portland, Oregon.

An example of a jumbo ship in transport.

Coordination with Nearby Projects

- WSDOT coordinates closely with:
  - Mercer Corridor Project (SDOT).
  - Elliott Bay Seawall Replacement Project (SDOT).
  - Waterfront Seattle (SDOT).
  - SR 99 Spokane Street Overcrossing Project (WSDOT).
  - Seattle Multimodal Terminal at Colman Dock Project (WSF).

A design concept of the new waterfront and Alaskan Way.

Questions?

For more information on the Alaskan Way Viaduct Replacement Program, please contact:

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